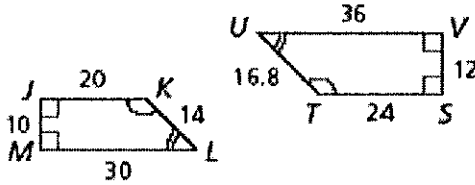


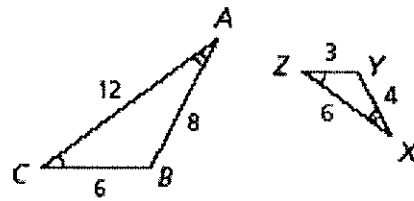
4.3 Similar Polygons HOMEWORK

For each pair of figures below, identify each pair of congruent angles and proportional sides.

1.

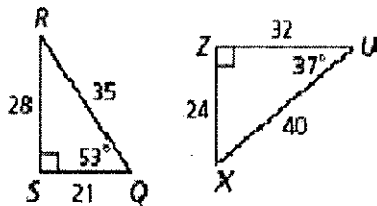


2.



Determine whether the polygons are similar. If so, write the similarity ratio and a similarity statement.

3. $\triangle RSQ$ and $\triangle UXZ$

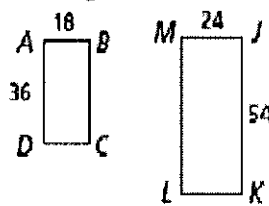


Similar : Y or N

Similarity Statement : _____ ~ _____

Similarity Ratio : _____
(Scale factor)

4. rectangles $ABCD$ and $JKLM$



Similar : Y or N

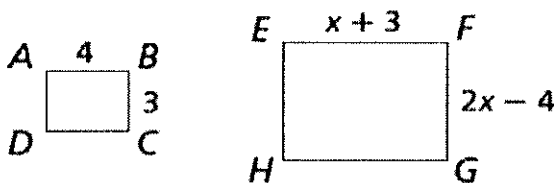
Similarity Statement : _____ ~ _____

Similarity Ratio : _____
(Scale factor)

5. **Hobbies** The ratio of the model car's dimensions to the actual car's dimensions is $\frac{1}{26}$. The model has a length of 3 in. What is the length of the actual car?

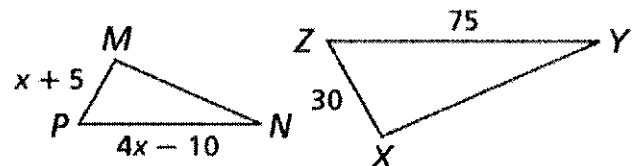
7. Solve for x

$ABCD \sim EFGH$



8. Solve for x.

$\triangle MNP \sim \triangle XYZ$



9. Which value of y makes the two rectangles similar?

- (A) 3 (C) 25.2
(B) 8.2 (D) 28.8



10. $\triangle CGL \sim \triangle MPS$. The similarity ratio of $\triangle CGL$ to $\triangle MPS$ is $\frac{5}{2}$. What is the length of \overline{PS} ?

- (F) 8 (H) 50
(G) 12 (J) 75

